APHIDIDÆ OF NEVADA WITH A NEW GENUS AND SPECIES

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This paper is the second dealing with aphids occurring in Nevada. Unless otherwise indicated the species were collected by the author. The writer is indebted to Professors E. O. Essig and M. A. Palmer for aid in determinations. Mr. W. W. Sampson gave considerable aid in description of the first instar of the new genus.

Aphis cerasifoliæ Fitch. On *Prunus demissa* (Nutt.) at Reno, Nevada, October 20, 1939.

Aphis lutescens Monell. On *Asclepias* at Idlewild Park, Reno, Nevada, October 21, 1939.

Aphis helianti Monell. On *Asclepias* at Idlewild Park, Reno, Nevada, October 21, 1939.

Aphis medicaginis Koch. On *Vicia* at Idlewild Park, Reno, Nevada, October 21, 1939.

Aphis rumicis Linnæus. On nettle at Idlewild Park, Reno, Nevada, October 21, 1939.

Aphis varians Patch. On *Ribes* leaves at Idlewild Park, Reno, Nevada, October 21, 1939.

Capitophorus potentillæ (Walker). On rose at Overton, Nevada, June, 1935. (Knowlton & Smith, p. 151, 1937).

Capitophorus rosarum (Walker). On wild rose at Wellington, Nevada, October 19, 1939.

Capitophorus xanthii (Oest). On *Xanthium canadensis* at Overton, Nevada, June, 1935. (Knowlton & Smith, p. 151, 1937).

Cinara engelmenniensis (Gillette & Palmer). On *Abies* at Genoa, Nevada, July 20, 1939.

Epameibaphis utahensis Knowlton & Smith. On *Artemisia tridentata* at Centerville, Nevada, September, 1939.

Mucrotrichaphis toti Knowlton & Allen. On *Artemisia* at Elko, Nevada, July 1, 1939. (Knowlton & Allen, p. 33, 1940).

Periphyllus utahensis (Knowlton). On *Salix* at Wellington, Nevada, October 19, 1939.

Phorodon menthæ (Buckton). On mint at Idlewild Park, Reno, Nevada, October 21, 1939.

Schizolachnus pini-radiata (Davidson). On pine at Centerville, Nevada, July 20, 1939.

Nevadaphis Drews, new genus

Apterous viviparous female. Front rounded; antennæ six-segmented, shorter than body, spur of VI about as long as base, or longer. Eye with reduced number of facets and with ocular tubercle large. Rostrum shorter than body. Cornicles very short, cylindrical, rims absent. Cauda apparently ovate and with long hairs, longer than length of cornicle.

First instar nymph. Antennæ four-segmented, shorter than body, a few prominent hairs, spur slightly longer than base, distal segment narrowly elongate, conical with sensoria forming a rosette with one large and five or six smaller ones. Eyes with reduced number of facets and with ocular tubercle large. Rostrum acute, nearly as long as body, apical segment very slender and long, remaining segments with a few prominent hairs. Cornicles very short, rimless, bases slightly narrower than tip. Cauda broadly rounded, wider than long, with two to four long hairs. Distal tarsal segment with four or five bristles longer than width of segment bearing them; proximal segment with two setæ on the top of the segment nearly as long as length of inner side. This first instar approaches none of those that are known from the Pacific Coast.

Genotype: *Nevadaphis sampsoni* Drews, new species.

In Nevsky's (1928, p. 4) key to the genera, *Nevadaphis* keys out to *Xerobion* and *Xerophilaphis* but fits neither genus. It differs from *Xerobion* in that no flocculent wool was evident, the cuticle is not markedly sculptured with hexagonal reticulations, the cornicles are cylindrical, not truncate, the cauda is longer, not shorter than cornicles, and ovate not bluntly-conical. It differs from *Xerophilaphis* in that no fine pruinose matter was evident, the cornicles are rimless, the cuticle is not plainly hexagonally reticulated, and the unguis of VI is about as long as base or longer.

Nevadaphis sampsoni Drews, new species

Apterous viviparous female. Body ovate but with head and thorax smaller than abdomen; color a dirty yellow to reddish-brown, often mottled; all hairs inconspicuous. Front of head rounded, without frontal tubercles; antennæ reaching just beyond third coxæ, secondary sensoria not present, a few simple hairs present, III generally shorter than IV or V, VI duskier than other segments. Eyes with reduced number of facets, ocular tubercle taking up about one-third of entire area of eye. Rostrum acute, reaching beyond third coxæ, with numerous long hairs arranged in two rows along its length. Lateral thoracic and abdominal tubercles present. Cornicles cylindrical, base usually

narrower than tip but at times slightly wider, about half as long as cauda, at times with one or two long hairs arising from basal area of cornicle. Cauda broadly ovate and with some hairs, usually about one-fourth the length of cauda. The following measurements are given in mm. Body: width 1.32, length 1.88. Appendages: antennal segments, I .067, II .063, III .180, IV .230, V .220, VI base .153, spur .167, rostrum .705, hind tarsi .118 (less claws), tibia .564.

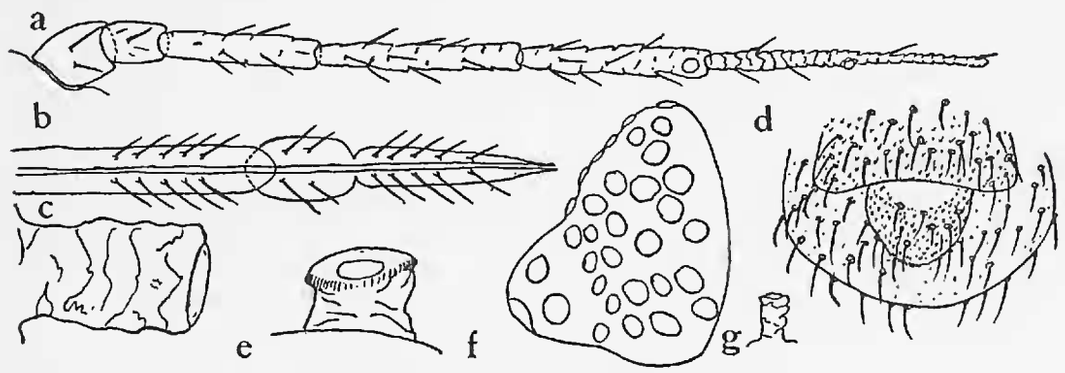

Figure 1. *Nevadaphis sampsoni* Drews, new species. a. antenna, b. rostrum, c. and g. cornicle, d. cauda, e. cornicle of first instar nymph, f. eye.

Segment III varies from shorter than IV to one-fifth longer than IV. V also ranges from shorter to one-tenth longer than IV. In the illustrations the two groups of figures a-d and e-g are drawn to different scales. All illustrations except f are of the apterous viviparous female.

Type, No. 4678, C.A.S., Ent. and paratypes in the collections of E. O. Essig, W. W. Sampson and the author, collected during September, 1939, and again on October 20, 1939, at Topaz Lake, Douglas County, Nevada, at an elevation of 5000 feet.

Collected rarely on the roots of *Artemisia tridentata* but abundant when present, feeding from the surface of the ground down to a depth of ten inches or more; sometimes attended by small ants. Although observed over a month previous to the date of collection, there was no evidence of sexual or alate forms.

References

Knowlton, G. F. and **C. F. Smith.** 1937. Some Aphids of the Genus Capitophorus. Canadian Entomologist, 59:150-152.

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